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REMINISCENCES OF PROVINCIAL SURGERY

UNDER

SOMEWHAT EXCEPTIONAL CIRCUMSTANCES.

By "AN OLD GUY'S MAN."

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(Communicated by T. BRYANT.)

The following reminiscences of provincial surgery have been written at my instigation by an old Guy's man and eminent provincial surgeon. I send them for publication to the 'Guy's Hospital Reports' as a valuable and interesting record of good work in which every case has its point and every recorded incident its interest.

The brief records of Mr. Crompton's career which preface the reminiscences add completeness to the whole, which I am confident will be acceptable to the readers of our 'Reports.'—Thomas Bryant.

You ask me to give some account of myself. I was apprenticed to the late Mr. Richard Wood, himself an old Guy's man and personal friend of Sir A. Cooper, in 1823. He was senior surgeon at the Birmingham General Hospital, and a noted operator, especially for stone. Joseph Hodgson was much his junior, and, some would say, a superior man, but certainly not in operations.

I dressed at the General Hospital during four whole years as Mr. Wood's dresser, living in his house and going with him to nearly all his private operations. I entered Guy's in 1828, and lived in the house with Mr. Dodd, then Demonstrator of Anatomy; Dr. William Guy, still I think alive, being also house pupil at Mr. Dodd's.

After one year spent there my relative, Mr. John Morgan, late Surgeon to Guy's Hospital, took me into his house in New Broad Street, where I was treated as a friend, and became as intimate as a boy could be with Drs. Addison and Hodgkin, Thomas Bell, and other naturalists, Morgan being himself a good naturalist, as perhaps you may remember.

I passed one summer in Paris, the year after Dr. Blundell removed the uterus through the vagina. I *must* tell you this story. One day I was standing at the lecture-room door at La Pitié, when Dr. Blundell, not recognising me, though I was very regular at his lectures, gave me his card to give to Lisfranc who was lecturing; on receiving it Lisfranc turned, bowed, and rushed at Blundell, kissing him on both cheeks! Then, turning to the class, Lisfranc introduced Blundell as the distinguished Englishman who had immortalized himself by that operation. A patient was brought in and laid on the table to have a large fungoid-looking os uteri removed, an operation which Lisfranc was then doing freely and fond of. While the woman's uterus was being pulled down by large hooked forceps, Lisfranc kissed her on her cheek, upon which little Blundell thought he ought to do likewise. There were at least half a dozen English pupils in the room, and you may imagine Blundell's face when we simultaneously clapped our hands and cried, "Well done, Blundell!" The story fled to Guy's in a very short time. Nevertheless we were proud of him, for he gave the class, at Lisfranc's request, an excellent lecture in the French language.

When I had passed the college I came to Birmingham and began practice soon, and first as a dispensary surgeon, whose chief duties were attending operative cases of midwifery. On the retirement of Hodgson from the Eye Infirmary he had founded here I succeeded him, and my

first surgical operation on a living person was for cataract in both eyes by the lower section, using both hands, on an old woman of eighty, who recovered with good sight, to my intense delight.

After eight years of this practice I became surgeon to the Birmingham General Hospital, as colleague with Mr. Wood and Hodgson among others, giving up the Eye Hospital because according to hospital laws I could not hold both; and here I am now, in my eighty-second year, and expecting to be operated on for cataract myself; retributive justice, I suppose!

I think this is quite enough about myself. I never had any ambition for notoriety but only to be as good a surgeon as my wits and naturally great talent for idleness could make me.

I cannot think the notes I send with this or those you already have can be worth being placed in our dear old Guy's 'Reports.'

I send you the accompanying "Surgical Reminiscences" under rather unusual circumstances, and I write them under peculiar circumstances, for I am now getting cataracts in my eyes, and at the present moment do not see what my hand writes, but hope it forms the words my mind would dictate. It is a curious sensation, and is new to me within the present year. As I cannot read I suppose my mind goes back more easily and perhaps more clearly into the past than it has had time to do before. This must be my excuso for writing, and it is a pleasant occupation. I have depended upon a friend for corrections necessary, for if I tako my pen from tho paper I do not know what or whero I have written.

Ligature of the Axillary Artery for Wound.—It is now some years ago since I was called up early one Sunday morning by Mr. Ransom, of Darlaston, nine miles from Birmingham. He camo in his pony trap, and told me he wanted me to go with him as quickly as I could "to tie the subclavian artery!" I was somewhat surprised, but as I had had one opportunity before of placing a ligature on the

subclavian for aneurysm in the axilla I was more prepared than perhaps I should otherwise have been.

I got together what instruments I could, including an "aneurysm" case, with the needle already furnished with a strong, fine bit of pike line, and, jumping into the carriage, asked him the nature of his case.

He told me he had attended a poor woman, a month or more ago, in her confinement; that she had had abscesses about her since, and one in her left axilla he had opened with his lancet; that since that time she had bled from the wound repeatedly at intervals, notwithstanding his having stuffed the wound more than once with lint. Each time he attempted to remove the pledget she bled violently, and he could only stop the hæmorrhage by renewed stuffing of the wound and binding pads of lint and bandaging the arm to the side.

When I got to the house I found the woman in a good-sized room with two small windows on the right side of the bed. She was very pale and reduced. I expressed my doubts as to his having really injured the main artery, but a small axillary branch might give much trouble, coming off so near a large artery, and with that conviction I removed all the bandages, emptied the wound, and, as no bleeding occurred, we walked to the window to talk. In about a minute the patient called, in a feeble voice, "I am bleeding!" I jumped round the bed, seized the arm at the axilla with my left hand, pressing as hard as I could upward on the position of the artery. I plainly heard the "whish, whish" of the blood on the sheet. Mr. Ransom came, and having pulled the patient to the very edge of the left side of the bed, he placed his hands where mine had been pressing the artery against the head of the humerus. The husband being the only other person in the house, we called him up and instructed him to hold the door-key handle wrapped in lint firmly above the clavicle, but I do not think he was of much use. I emptied out all my instruments on to the bed close to me, and then raising the extended arm over and resting it on my head, kneeling down, I with my left hand enlarged the wound carefully upwards and downwards with a scalpel, thus making a fair incision into a cavity already

made by the pledget and the blood, then clearing the cavity with my finger and bits of sponge. I took my director and scraped the cellular structure up and down, where I thought I ought to find the artery. I soon saw two large *white* nerves lying near each other, and with a little more scraping I found the axillary artery lying between them, as close as "three in a bed."

There was positively no bleeding, so that, to be sure I was right, I asked Mr. Ransom to release his pressure, when, to my delight, I saw blood coming from a *longitudinal* wound in the artery fully the size of the breadth of a good-sized lancet. Pressure immediately arrested the bleeding, and I had then only to gently separate the artery from the nerves (I saw no vein), and then passing my armed aneurysm needle between the nerves and the artery, and with my right hand, now released from holding the arm over my head (for the poor woman was too faint to stir), I pulled the double end of the ligature forward, and, dividing it, withdrew the needle, and, separating the now two ligatures, I pushed one upwards under the artery above the wound and tied it firmly. Then asking Mr. Ransom to release his pressure carefully, we had the satisfaction of finding the bleeding entirely controlled. I then drew the lower ligature down below the wound, and tied it also.

This ended the case. She recovered, and I saw her one day in the street, while visiting another patient, two months after, when she showed me two fingers bent towards the palm, which she said she had not yet recovered the use of, showing want of power in the extensors of the hand, probably arising from partial injury to tho musculo-spiral nerve. I never ligatured an artery with more ease, but I attribute all this to the fact that the artery had been wounded perfectly longitudinally, not transversely nor divided and subsequently retracted. My left hand came well into use. I used by preference to bleed patients in the old times with my left hand in tho left arm, so that they could at once use their right arm without danger or inconvenience after having been bled.

Double Primary Amputation of the Lower Limbs from

Railway Accident.—It is seldom a patient lives who has undergone double primary amputation of the lower limbs. This was so especially before the use of chloroform.

I think the case I now relate is worth record. In the very last interview I ever had with Mr. Aston Key he told me double primary amputations *never* were successful at Guy's, and asserted, in his usual energetic manner, that my patient would not live. The case happened as long ago as before his death from cholera, when it was epidemic in London (1849).

A very handsome man, of large form, fell off the railway platform at Camp Hill, near this town, falling under the train, and had one thigh and the leg of the other below the knee completely smashed. He was brought to the General Hospital, and both limbs were at once amputated, one about the middle of the thigh, the other in the usual place below the knee.

The case gave me much anxiety, as may be supposed, but he continued to live, the wounds healing well. He, however, when nearly well, got an attack of pleurisy and some pneumonia; this, however, he recovered from. I found he was engaged to be married to a very nice respectable young woman, whom I found one evening, after the usual hours for patients' friends to visit, still sitting by his side. I told her of his state, and I said I thought she should think very seriously about her engagement, hinting that I thought it had better be broken off; but she most naïvely said, "Oh! sir, I am quite content to take the rest of him." Poor thing! I honoured her much for her constancy. He got well, and he married the young woman, who eventually died of consumption. He then married her sister, who also died of the same disease, and he then married a third wife. I believe he had two daughters. When I saw him last, some considerable time after he left the hospital, he was very stout. I believe he was an engineer on the Midland Railway, and being a very ingenious man employed himself inventing different artificial limbs, to serve his purpose better than those then in common use.

Courage or Insensibility (?) to Pain during Double Ampu-

tation of the Legs without Chloroform.—A man of intemperate habits, living at Tamworth, lay drunk during a frosty night with his feet in a puddle by the railway. His feet were frozen in the morning, and eventually sloughed off, the integument closing in a conical form, leaving the extremities of the tibia and fibula exposed and carious. I heard of the case, and recommended him to be brought to the Birmingham General Hospital. When I saw the case I was astonished at the wonderful effort of nature towards cure. If the bones could have borne ferules like a walking-stick, being placed on them, the man would have been able to walk as well or better than on wooden legs. However, that could not be, so the man and I agreed that I should amputate the legs at the usual place, leaving him good stumps and the knees, whereupon to place the common wooden leg. I removed one first, the man sitting on the table and holding the thigh himself and looking on. Not a sound escaped him, but, when done, he said, "By gam" (a euphemistic expression for one of another sort) "it is sharp." After three weeks' time I removed the other leg in the same manner, except that the man thought the saw did not cut well.

When he was nearly ready to leave his bed he again took me into his consultation as to the inconvenience of the length of the common wooden leg, and asked to have them made only nine inches long, as then, "when he had grog aboard," he should not have so far to fall! He lived years after, and was well known as a tramp, I think.

Amputation of the Arm close to the Shoulder-joint—Courage of the Patient before the Days of Chloroform.—Some years ago I was called in the night to go to Meriden to an accident, prepared to amputate. I found a poor labourer lying on his cottage bed, his left arm hanging over the edge of the bed, dropping blood into a chamber-pot. A tourniquet was tightly placed just below the shoulder-joint; the arm was black, as if already mortified. I heard that the man's arm had been caught in the cog-wheel of one of the agricultural machines, and was drawn in up to the shoulder. There was nothing for it but amputation above the injured part—in fact either close to the head of the

humerus or by disarticulation of the whole. There was no room for a tourniquet, and I requested Mr. Clark, the surgeon of the village, to press upon the artery against the head of the bone.

There was a boy in the room, an apprentice, I was told, but he declined to come near the patient to hold out the arm. I was therefore obliged to hold the artery against the head of the bone with my left hand, while Mr. Clark held the arm out at full length by the hand; but he told me he always "fainted at the sight of blood," so turning his face and body away as far as possible, he held on till I had made my incision and sawn through the bone as high as I could.

There was only a cottage candle in the room, and therefore I asked Mr. Clark to hold it, so that I could look for the arteries, but he had had enough.

The poor patient was sitting on a chair making no complaint; in fact I think there could not have been much pain felt, from the appearance of the parts, so he himself said, "Sir, if you will give me the candle, I think I can hold it;" this he did, bringing his right hand round with the candle in it, so that I had a good view of the face of the stump. I was delighted to get my tired thumb and hand free, when I saw the orifice of the brachial and could pull it out by the tenaculum, and left it hanging till I could tie the artery, and so with the smaller vessels. After that I had no further difficulty, as only one or two small arteries seemed inclined to bleed.

The man recovered, but I heard he died of phthisis six months afterwards; indeed, he was phthisical at the time of the operation.

Having been all my life inclined to faint when witnessing pain, or the anticipation of pain, I was sorry for Clark, and often wondered how he could have got the practice and local reputation I knew he had. I am confident, however, that it is not the "sight of blood" which turns people faint, but the sight of suffering or its anticipation.

Young soldiers *were* known to faint long before the lash was applied to the backs of their comrades, and I believe the pupils of the present day do not faint as *we* used

to do before that wonderful blessing of anæsthetics was known.

Suicidal Cut-throat.—A tall middle-aged man walked into the surgery of the General Hospital one afternoon while I was accidentally there—his head erect, his arms folded over the chest, his hat on, and with an air of defiance on his face. One or two people were following him.

He had a large gaping wound just under his chin, right in front of the neck, looking like a large bloody second mouth. There did not appear to be much bleeding; evidently no large vessel had been wounded. I placed him on a chair, and looking into the wound saw the glottis entirely exposed; the epiglottis with the os hyoides was moved upwards, entirely separated from the thyroid cartilage. I had never seen the action of the arytenoid cartilages before. The opening sides moved perfectly laterally, as a book laid on a table and opened and shut in the middle of the leaves. I was so much surprised to think that those small muscles should be formed for and enabled so to move rhythmically, without ceasing from the first instant of birth till the last breath, through the long years of a long life, just as the heart itself expands and contracts without ceasing, that I almost forgot my surgical duties.

I then drew his head down so as to close the wound, but he became purple and ceased to breathe. I then raised and threw back his head, and began to put ligatures through the edges of the thyroid and os hyoides, in the fibrous structures of the lower edge of the os hyoides and the upper edge of the thyroid—two on each side of these parts. On opening the mouth I found the tongue firmly raised up to the palate, and, pushing my finger over the tongue, pressed it down, thus enabling the ligatures to be tied and the two parts brought in apposition. I then attempted to close the external wound, but I saw he would soon be dead for want of power to breathe. I saw nothing was to be done but to make an opening through the upper rings of the trachea and insert a silver tube, which I did; then, drawing the head down, I put in a few sutures to the external wound to bring its edges together, and then, after bandaging, &c., the man, who never resisted me in any

way or seemed to feel the pain, was placed in bed and fed by a tube, &c.

The man, however, was soon removed to the lunatic asylum, where I lost sight of him. I heard that a man lived there for some months with a tube in his throat, who, I presume, was my patient.

It is an imperfect case, but worth record.

I do not know what may be thought of my surgery in this case, but it occurred long before laryngeal mirrors were known or the diseases of the throat accurately diagnosed, as they are now.

These are the cases that the resident surgeon and pupils have the great advantage of seeing and acting upon at *first* hand, advantages which are only possessed by any others very occasionally.

Wound of the Posterior Tibial Artery—Ligature.—In our anatomical lectures we were taught that the posterior tibial artery was not uncommonly cut by a slip of the adze puncturing the leg a short way above the inner ankle, and it was well to practise tying it, as the operation was sometimes difficult of accomplishment. The only time I ever recollect having to tie the artery for a wound was a case at Dudley, where I was called to go on account of repeated bleedings from a punctured wound about the middle of the leg, a short distance from the inner edge of the tibia.

When I got there I found a young man lying in bed with bandages and blood about him, and was told he had been bleeding repeatedly for ten days from a wound caused by his knife slipping while cutting cabbages.

On examination, I found a wound, and the leg swollen and enlarged all about the calf. Having placed a tourniquet over the femoral I made a free incision in the course of the muscles, as if to divide the superficial from the deep muscles, and thereby opened a considerable sac filled with clots, &c., which, having well sponged out, I looked for the artery. I soon saw the white trunk of a nerve which led me to the artery. I placed a ligature above and below the wound and removed the tourniquet. The man recovered.

Thus, in my small experience of tying wounded arteries

at the place of wound, I have found the nerve an excellent guide to the artery, because it seems to retain its white appearance much the longest among the blackened surrounding parts infiltrated by blood.

Case of Hernia—Courage of the Patient.—It is a common remark that if one gets one case of hernia we soon get another, and a large proportion of operations are called for in the night.

I was called to a gentleman then living in a portion of Aston Hall, who had symptoms of strangulated hernia. I found the testis on the left side had not descended, and a hernia existed on that side. The tumour hardly passed beyond the external ring. I made my incision horizontally down to the sac, in the direction of the external inguinal ring, expecting the constriction to be at the internal ring. I found a portion of bowel strangulated and reduced it. I then saw what looked like a very small fœtus, about the size of a peeled almond, and a white, rather thick cord, nearly encircling it. This was the undeveloped testis and its cord. I unrolled the parts, and found the cord was long enough to let me place the testis in the upper part of the scrotum, where it remained. The symptoms of strangulation ceased, and the gentleman completely recovered.

Out of curiosity, five years afterwards, I asked him to allow me to examine the parts. I found the small testis there, half way down the scrotum of that side, and quite the size of a testis of a boy fourteen years old. I may state the gentleman had already two living daughters.

I leave the physiology of this case to others, but I made up my mind never to remove such a testis, though I have since seen it done.

I have omitted to state that I placed a bed-candlestick on the abdomen of the patient, and he held a tall table candlestick on the bed close to his hip while I operated, and neither was stirred from its position.

I am sorry I cannot now remember who the surgeon was who was present with me, but, if still alive, he will no doubt remember the case.

Operation for Umbilical Hernia—Wrong Diagnosis.—I

was some years ago called to see an elderly lady at Leamington in consultation with three other medical men. She was evidently suffering from obstruction of the bowels and acute peritonitis. She had an umbilical hernia. On examining the abdomen I found an umbilical hernia, but it was neither tense nor painful; but the symptoms being so acute I did not consider myself justified in not urging an immediate operation, thinking that a small knuckle of bowel had probably become strangulated in the old hernia. She consented with difficulty, and with no hope of any good following. She told us that it would not relieve her, for her sister had been operated upon in the same manner, and she had died after it. I operated and found no sign of obstruction or inflammation in the hernia. I reduced what I could, leaving some perfectly sound omentum in the sac.

She died next day, and on a post-mortem examination a large gall-stone was found lying on the distended colon. Bile was effused over the bowel, and acute peritonitis from ulceration of the gall-bladder existed.

Though I was wrong as to my diagnosis of the cause of the peritonitis, I still think I was justified in my exploratory operation. I suppose a surgeon of the present day would say he must make another exploratory incision, and, passing his hand into the abdomen, he would probably have found the gall-stone and peritonitis and effusion of bile, and the old lady of seventy-six would have died just the same.

Case of Abscess, external to the Peritoneum, opened at the Umbilicus.—A delicate, dark-haired child had been suffering for some days from fever and great pain, which the surgeon in attendance considered arose from acute pleurisy.

I was asked by the friends to see the child while I was in the neighbourhood. I found the child raised up by pillows looking very ill, and the breathing remarkably rapid and short, more so than I had ever observed before. I watched the child for some time, listened to the chest, but could detect neither pleurisy nor inflammation of the lungs. I placed the child down flat on the bed, and turned down the clothes to watch the breathing more accurately. It immediately struck me that the abdomen was motionless, the

diaphragm evidently not being used, but the chest muscles alone in breathing. On examination I found great tenderness over the abdomen and hardness. This led me to diagnose inflammation in the abdominal parietes, which ended, after some days, in my opening an abscess at the umbilicus with great and immediate relief. She was some time ill, but lived to be married and had children. It was suspected she had fallen on something and hurt the abdomen, but the origin of the inflammation was always obscure.

The case was most instructive from the peculiar form of breathing which nature adopted to save pain of motion to the inflamed parts, which is my only reason for recording the case. Both sides of the chest were raised in respiration equally to a great extent in the upper half under the clavicles, which would not have been the case if the child had had pleurisy or pneumonia.

I find an old letter to a friend dated April 9th, 1847, in which I told him I on that day performed lithotomy on a boy aged four under the influence of ether. It was the first time the remedy for pain had been employed at the General Hospital during that operation, and was perfectly successful. A large number of persons were present from curiosity.

This reminds me of a curious scene that occurred at the hospital a short time before, on the first attempt to use ether. A number of the Roman Catholic clergy had become curious about it. Mr. Hodgson came down with them one day, and the house surgeon, Mr. W. Freer, was asked to look for someone who wanted a tooth out, as Mr. Robertson, the dentist, wished to see the effect before he used it in his practice. Mr. Freer found two girls were waiting to have teeth extracted, and they were asked if they would try the new remedy to save them from pain. They consented, and during the early effects they each became violent. One of them, when Mr. Robertson had his instruments in her mouth, struck out and hit him on the nose. He exclaimed, "Oh! this will never do for private practice!" The clergy went home and had a consultation on the varied scene, and denounced the remedy as immoral and to be condemned. This I heard from a Roman Catholic lady now alive.

The next occasion on which the anæsthetic was used was a day on which Mr. Hodgson was to remove a woman's arm. The bag of the anæsthetic apparatus was placed over her face, and she soon began to struggle and become very blue in the face. It took three or four persons to hold her in the chair she was placed in, but all in vain ; she struggled still, as I thought, because she was being suffocated for want of the right proportion of air. The arm was eventually removed.

The operating room was full of persons, and among them some of the priests, who had been invited, I suppose, by Mr. Hodgson on this day.

The next patient was one of mine, a tall, quiet Irishman, who had popliteal aneurysm. When he entered the room I asked him if he would take something that would render him insensible to pain ; but he said "No," he would bear the pain. It was the first time I had attempted to ligature a femoral. The room was full of spectators, among them the cavalry surgeon from the barracks, who in his eagerness kept his hand on the tumour. I tied the artery without any unquieting circumstances, and the army doctor said, "All pulsation has ceased." When the aneurysm was cured I found I had to treat this man for sore-throat and secondary eruption. I have a firm belief that a large proportion of aneurysms have a venereal origin, and hence the good, if there is any, in treating them with the iodides in some form.

The man never stirred or uttered any expression of pain, lying as quiet as if dead—a great contrast to the former patient. Thus anæsthetics did not promise much here in this first commencement.

Note.—The army surgeon was a large, heavy man, noted for his working in worsted on the frame, which was then the fashionable occupation, while his wife was an excellent horsewoman.

Gunshot Wound—Death from Alarm.—Many years ago I was sent for to go eight miles out to see a gentleman who had been shot. When I got to the inn where he lay I found a stout gentleman lying on a sofa, with all his shooting

clothes on and strong leather gaiters. He had been shot in the middle of the leg by his friend's gun-barrels falling out of the stock. The barrels fell to the ground, bounced up, and a barrel went off. The gentleman was standing not a yard off. The whole charge went into the leg, breaking the fibula, but not the tibia, nor passing through the leg. I told him I thought there was a chance of cure without amputation. He raised himself, looked at his leg, and with a loud cry fell back dead!

Gunshot Wound of the Knee—Primary Excision—Cure.—A young poacher was brought into the General Hospital, having while crawling along the ground, by some means, discharged his gun, the whole charge passing into the knee-joint so close together that when I saw him I determined to try excision of the joint only, though that operation was nearly a new one, only one or two cases having been attempted with us. I saved all the integuments I could, turning back the patella and sawing through the ends of both bones, only just as far as they were shattered. A number of shot fell into my hand and on the ground during the operation. The knee was put up most carefully by our excellent house surgeon, Mr. Goodale, a perfect union of the bones took place, and a very useful stiff leg was the result.

The man came into the hospital and died of consumption, some six months after, and we obtained his knee.

When I compare the difference between the facilities enjoyed by the hospital surgeon, "with all the pomp and circumstance," and the difficulties frequently attending country surgeons' practice, how great is the contrast, and the credit due to the latter when well accomplished!

In the one case, the patient lies on a firm, raised table, the head placed on a firm pillow and supported by the hands of the one person responsible for the proper administration of the chloroform or ether, while the patient "dreams of heaven, nor thinks that e'en woman's wiles can haunt him there!" The surgeon, surrounded by the assistant surgeon, the trained nurses and intelligent pupils, who hand him every instrument he can possibly want; the patient held in any

required position ; the nurses, with clean, disinfected sponges, stand ready to hand them, as they are required, over the shoulder of the assistants, without a word ; the pupils, with forceps of every description,—directors, needles, ligatures, Esmarch's bandages, &c., as wanted, and presented without a word, especially the late excellent invention of clipping forceps, with handles like scissors, and which, when once clipped on to any bleeding vessel, are thrown over the edges of the wound till they hang like the bobbins of the lacemaker over her cushion on which she works ; everything clean, disinfected, and in abundance. I have in practice found that a roller tightly applied up the limb after it has been raised up for a short time, makes an effectual substitute for an Esmarch's elastic bandage. In two cases of enchondroma of the metacarpal bone of the third finger in children, both girls, who came to my house with their mothers, each about nine years old, I rolled the fingers and hand and wrist tightly with common bandages, then tied a tape tightly round the wrist, placed a handkerchief sprinkled with chloroform over their faces, and while they sat on the mother's knee, she holding the arm on the table, I cut down to the bone without a drop of blood being spilt, and with a small gouge removed all the enlarged portion of the bones, having carefully separated the periosteum on each side. In both cases new bone formed, and some time after I found the children learning the piano, with perfect hands.

These two cases are instances of similar cases during one year, while many months or years may elapse before I see two others.

Case of Pistol-shot.—The late Mr. Sharman, of Birmingham, brought a gentleman to my rooms who, having gone into a shop to buy a revolver, was trying one and had snapped one or two barrels, but told the woman that he did not quite like it. He gave it back to her and she snapped one or two more barrels, but neither of these wise people had taken the trouble to look if any barrel was loaded, and the last barrel being loaded the small ball entered, and nearly shattered the sternal end of his right clavicle. The gentleman did not show any sign of shock, so I told him, as he

was then alive, that I hoped no serious consequences would ensue.

I took care not to attempt finding the ball by probing, but on examination with my finger through the wound I felt a portion of the head of the clavicle broken into small bits. Simple dressing was placed over the small wound and the arm kept quiet to the side, and to this day no one knows where the ball is. My belief is that it flattened itself against the bone and fell back out of the wound. He was soon quite well and does not know how near he was to receiving a fatal wound, had the ball gone anywhere else in the same neighbourhood.

I suppose, taking an average in England, at least more shooters are shot than those shot at, by their own foolish handling of such weapons.

This case reminds me that, though I have not unfrequently seen the sternal articulation of the clavicle somewhat raised and looking partially dislocated, from a relaxed state of the ligaments in some persons, as there are many young persons, especially girls, who are proud of being able to what they call "put their thumbs out," I only remember to have seen a real dislocation backwards once.

Case of Dislocation of the Sternal Extremity of the Clavicle, backwards.—I was sent for one evening to go to Rugby to see one of the students at the school who, in a rush at football, was thrown down backwards and "another knee," in falling, came down full upon his chest.

When I saw the young man, a powerfully-made youth, he was in bed, and I found the left sternal extremity of his clavicle was displaced backwards and somewhat upwards. I had read somewhere of a similar dislocation in which there was found extreme difficulty in replacing it.

I raised the young man in bed. I found a large, thick pair of worsted stockings on the bed, rolled up in the usual manner when clean, which I placed high up under the axilla, and asked the attendant surgeon to keep them there, and when I gave the word to press the elbow down closely to the side. I then got on the bed, behind the patient, placing my knee on the spine between the two scapulæ and my hands

grasping his shoulders. I said, "Now!" and I suddenly pulled the shoulders back, as hard as I could. The bone as suddenly slipped into its place, and so ended the case as far as I was concerned. He made a good recovery.

This is another of the cases that may be seen more often by resident surgeons of hospitals than by those "unattached."

I have not picked out these successful cases purposely, but because they have recurred to my mind first and more easily than others, though I think we frequently learn more from unsuccessful cases.

Paracentesis.—About the year 1840 Dr. Fletcher, as physician, and I as surgeon to the Birmingham Dispensary, first attended a red-haired boy of about eight years of age for pleurisy in the left side.

Dr. Fletcher was careful and well informed in the use of the stethoscope, even in those early days, having been a pupil in Paris. He diagnosed the pleurisy and subsequent effusion into the cavity, and he asked me to tap the chest, a perfectly new operation to me.

It was done, and a large collection of fluid was evacuated, I think about a pint. On shaking the boy a day or two after, we could hear the wash of some fluid still there, on account of some air having been let in during the tapping, but it all absorbed, and many years after I met the patient, a fine, tall young man.

In this case it was evident that air had entered during inspiration while the operation was being completed, and I well remember that it cost Dr. Fletcher much thought as to how to avoid so unwelcome an admission of air, particularly in cases of empyema. He modified the shape of the trocar so as to affix a membrane so flexible on the end of the tube, as to be drawn up to the open end of the instrument on each inspiration, and thus he succeeded in preventing the admission of air to a very great extent. Then when elastic tubing was invented he used that, fastening it on to the trocar, and passing the other extremity of the elastic tube into a vessel containing fluid. He had several very successful cases afterwards.

I do not know whether this case of tapping the chest was the first done in Birmingham, but I know my old master, Mr. Wood, who for a long series of years had had a very extensive field of practice, both operative and general, had never seen paracentesis of the chest, nor had I ever, during my whole pupilage and practice up to that time, seen the operation.

French medical men, Laennec and others, and some few English had recommended it, but it was certainly not much practised.

Not long after Dr. Fletcher's case, Mr. Wood, on my suggestion, took me to see a gentleman's son near Alcester, whose case, from his description, I thought a proper one for tapping, and he allowed me to tap the chest of a boy about fourteen years old whose left side was enlarged and the intercostal spaces bulging. I let out a large quantity of whey-like fluid. Some time after this an abscess formed from which considerable quantities of pus were discharged on coughing or any exertion. Yet he recovered and lived to be the plague of his family and neighbours from his wild habits, having been spoilt in every way by his mother.

The late introduction of the aspirator, which I have used since, has greatly improved and increased the success of such operations.

I have assisted the late Mr. Goodall more than once in aspirating the knee-joint for chronic effusion, and injecting tincture of iodine. Once he injected the joint a second time on a recurrence of the effusion, ending in a perfect cure.

An aspirator when in perfect order is all that can be wished, but an imperfect one is worse than useless, as I have experienced in a case at Fazeley of large abscess in the thigh from hip-joint disease.

This reminds me that I have only once removed the head of the femur for disease of tho hip-joint. It was the first time it was attempted at the Birmingham Hospital. After the operation the boy was sent to tho seaside. He recovered from all the abscesses, and I saw him somo years afterwards, an athletic-looking young man, again admitted into tho General Hospital, having fallen down and broken his thigh on tho other side. I had thus an opportunity of seeing

that the leg on which I had operated was so shortened as to be useless and he had to walk with a crutch.

It may be of interest to report the following case of tapping the abdomen.

A few years ago I tapped a female of intemperate habits, for dropsy from diseased liver, when to my astonishment the fluid evacuated from the abdomen appeared to be pure red blood, and to the extent of quite or more than a gallon. I looked to see her faint or die, but she was as cheerful during the operation and after the wound was healed as ever. I looked for such cases in books, and found that the same sort of fluid had been rarely seen in cases of cancer of the liver. The most extraordinary thing to me was that on a second tapping about a month after, only clear serum as usual was evacuated in a larger quantity. A short time after this her breathing became oppressed on the left side of the chest, which was found filled with fluid. It was determined to tap the chest, which was done with the aspirator, and the same sort of bloody fluid as was first drawn from the abdomen was evacuated. She sank and died a short time after.

As an instance of Dr. Fletcher's accuracy of diagnosis with the stethoscope in his early days, he once diagnosed the presence of *three* fœtal hearts in a young woman, one on each side and one above. We both thought we were mistaken in the sounds and the rapid pulsations, and did not believe in our diagnosis. The woman, however, in due time was delivered of three living children. She was Irish as usual!

Osteo-sarcoma.—It is now thirty years since I saw a young man living near Atherstone who had been a patient of the late Sir William Lawrence, who had tied the femoral artery in Hunter's canal for pulsating tumour in the head of the tibia. During the cure of the wound the artery at the seat of the operation gave way, and Mr. Lawrence again ligatured the femoral in the upper third of the thigh.

The patient recovered from the operation and came down home, when he seemed to regain health, and the growth of the tumour seemed to be arrested. However, after attempting again to play cricket the swelling rapidly increased and

became very large, I should think two feet in circumference, measured over at the head of the tibia. There could be no doubt now that the disease was "osteo-sarcoma" of very large size. I advised amputation, which was strongly objected to by the friends and the medical man in attendance, who thought the patient would sink if he lost half a pint of blood.

I was being soundly abused by his friends for my cruelty in suggesting such a thing, when the young man rang his bedroom bell and asked to see me alone. He said he would have the amputation done, and I should come the next day to do it. I, however, recommended him to allow me to write to Mr. Lawrence and ask his advice. In reply I had a most interesting letter from him detailing the circumstances of the case, and saying there was nothing to be done but to amputate, though the chances were greatly against him. Taking with me Mr. Edward Moore, then a young promising surgeon, having just passed his examinations, I went prepared to amputate under chloroform. I put the tourniquet on, hoping to compress some of the probably enlarged vessels of the profunda, and then as rapidly as I could by circular incision, as low above the knee-joint as possible, removed the limb. There were no large vessels to tie, though eighteen ligatures were obliged to be used; the largest of the vessels was one just under the skin on one side.

The patient was excellently cared for both by his friends and his medical attendants. Mr. Moore lived in the house as friend as well as surgeon for three or four weeks, and the family surgeon was also in attendance. In six weeks I was told he was got into a boat to shoot wild ducks!

I saw him about a year after on his return from a tour in Ireland with his crutch and stick. But I heard that about the end of the second year he had severe symptoms of lung disease, of which he died. Probably there was secondary deposit in the lung.

The amputated limb I sent straight off to Mr. Lawrence, and it is probably now in St. Bartholomew's Museum.

The want of a little care while removing a limb, especially the leg through the femur, not seldom entails long trouble to the patient, the stump healing well except a sinus in the

face of the stump leading to the bone. This arises from the ease with which the periosteum separates from the bone in any limb that has long been disused from disease which necessitates the amputation. I suppose most operators are aware of the fact, and that this state of non-adhesion of the periosteum exists only in such cases, and does not exist when amputation takes place after accident, requiring primary operation.

The consequence of the former state of things is that an over-zealous assistant, or the operator himself, in pulling up the integuments for the use of the saw, draws the already loosely adherent periosteum up with them, leaving a portion of bone more or less in size exposed and denuded. If the saw is not used as far up as the bone is denuded, a ring of bone is then left which inevitably perishes, and many weeks pass over before this dead portion is thrown off through the sinus before mentioned, and the stump heals soundly at last.

With respect to this case it would be interesting to refer to Stanley's work on the diseases of the bones.

Cancer.—Any observations I may make on cancer are really reminiscences and personal, not derived at the present time from reading up the "Latest Intelligence," but the disease claims so great a portion of an operating surgeon's time and thought that I think I am justified in recording some of my own experiences.

It has been well observed that any portion of the body that is not used in healthy exercise of its function nature neglects to nourish properly. This has been frequently given as a cause of the degenerative process of cancer, and may be said to be the rule, though I lost one of my kindest patients and friends from cancer which first appeared while suckling her last child. She had had a large healthy family before. The medical man in attendance, supposing it to be an abscess, put his lancet deeply into the tumour (which was first perceived at that time by her) on the outside of the breast; blood only was evacuated. She died a few months afterwards. Happily such a case is rare, though there are said to have been cases in which women have borne children, though subject to cancer at the neck of the uterus.

There is no period of life, from the earliest infancy to latest years, in which some form of this malignant disease may not be seen.

I have seen an infant only a few months old with melanotic disease of the eye, who was also filled in its abdomen and other organs with tumours of similar nature.

The first *private* patient I ever attended was the mother of a medical pupil of my own. She died at about eighty-four, having had cancer of the breast nine years, five of them without her son's knowledge, though he lived in the house. The last I have had was my own cook, who had lived with me for nineteen years. She did all her work till within the last week of her life and died aged seventy. It is nine years since she showed me her breast, which, like the above-mentioned one, had shrivelled up and scabbed over a small deep wound. I have seen a single black spot on the foot and a single black "mole" on the back "take on bad ways," and in the space of two, or at most three years, invade internal organs so as to produce death from a "fading away" of vital power, though in both the above cases the first appearance of the disease was perfectly destroyed by operation as soon as seen by the surgeon. This form, it is well known, invades the bones as freely as other parts. Scirrhus, also, it is known, does so likewise by secondary deposit, bnt not, I think, so frequently or so extensively as the melanotic form.

As to the hereditary tendencies of these various sorts I cannot state from my own knowledge what the difference really is. I have not sufficiently exact knowledge of the varieties, but generally I feel certain the usual hereditariness, as stated in systematic works, is made *far* below the reality.

The common method of reporting the result of operations for cancer is in this form: "Case of cancer, operation, cure." This in strict truth is not correct in 100 cases out of 103 or even 101, for we too well know that if the patient only lives long enough the disease will inevitably return. The only case I can record as a perfect cure was that of a lady, now living, about eighty years of age. There is no disease except insanity in which the reticence of friends, not to mention that of the patients themselves, is so obstinately

observed. I could mention many curious examples of this. True statistics on the subject are at present impossible, partly from want of definite diagnosis during life, and partly from the well-known curious change that the secondary deposits present post mortem. Two things are certainly still wanting; one is to find out the essential first cause of the degeneration which has its own time of commencing, and the other to remove at the first instant the first sign of its existence, neither of which have we any chance of doing at present. A great proportion of cases, whether operated on or not, end in about three or four years, and Heaven knows that period is only too long for most of the poor sufferers; but there are many who go on more or less comfortably for five, eight, or ten years, and these are the gold mines of the so-called "cancer curers." I have watched them only too often; as I have said they are cured till they die or till their pecuniary resources are exhausted by these so-called "cancer curers."

We so constantly lose sight of our hospital patients after they have left our wards that it is impossible to get from these statistics the true returns after operations for malignant disease. I think we are much more likely to get what we want from private cases which we can trace to the end. But, like "a voice crying in the wilderness," when shall we ever know the cause and prevention of a disease that can lie in abeyance from birth till eighty or more years and then break out in some form and destroy the frail and aged body?

Dr. Wyer, of Leamington, has kindly reminded me of three cases upon which I had operated in that town, one of which is now alive after twenty-five years, a few particulars of which are mentioned later; and two others, one of which after a second operation and removal of a portion of the cicatrix lived ten years, and the second ten years after also. These are the longest of which I have any remembrance.

In the extended period in which I have been in practice I have had opportunities of watching the third generation affected with this obscure disease. I have known of nine individuals, consisting of an aunt, her first cousin, and seven nieces, who all succumbed to some form of malignant dis-

ease (except in one individual), some of whom I myself attended.

In another instance three ladies of position and fortune out of four refused all offers of marriage because they knew that both cancer and insanity were hereditary in the family. I myself attended three of them who died of the disease they so much dreaded.

Most of our domestic animals are the victims of this disease as well as man—a fact well known to veterinary surgeons. A relative during a long residence in India assures me that cancer must be exceedingly rare amongst the natives of India as he hardly remembers to have met with a case, though he has been told by surgeons that it was occasionally seen in the North-West Provinces. No treatment known at present is of *any* avail.

The difficulty of diagnosis between the soft form of malignant tumour and cyst is well known. I had a patient myself, Lady W—, who had seen Sir J. Paget for a tumour of the breast, who recommended a puncture before operation, and blood only issuing from the wound I at once removed it. It was as large as an orange, placed apparently upon rather than in the gland of a large breast which I entirely removed. The lady recovered well from the operation, but the disease appeared to return within a year in the spine, causing most acute anguish. This is by no means the only case in which the spine seemed to be the chosen place for secondary deposit.

In a case of sarcoma of the breast in a lady (a somewhat less malignant form of cancer, I suppose it may be called), during a whole year or more I watched the trial of Chian turpentine taken in mixture and locally applied, apparently without the least effect either on the constitution or the disease, which I was more surprised at because I recollect during my pupilage that the remedy was prescribed by Dr. Prout and others for hæmorrhage from the kidneys and for chronic affections of the bladder. The case ended, as they all do, by death.

Speaking practically, I think there are three or four forms of invasion that may modify our opinion as to treatment. One, the cuirass-like, hard, nodulated form, that continues

or may continue for years, slowly spreading over the integuments, yet indisposed to ulceration.

When a pupil I attended a lady who was subjected to this form, which extended over the whole breast on the right side, passing over the shoulder till it reached the scapula above, and under the arm till it reached the scapula below, leaving the motion of the shoulder-joint free; binding down the integuments firmly to the ribs; never ulcerating though it lasted many years. Her sole treatment was the use of a lotion of sal ammoniac recommended by her gardener.

A second, and perhaps the most common form, is that in which we feel a solid nodule, more or less large, usually on the outer or hinder part of the mammary gland and which is generally called scirrhus, with its well-known early adhesion of the skin to the parts below. This is the only form, in my experience, in which we see the shrivelling up in old age.

Another is a more or less soft tumour situated in or upon the gland, a case of which I give.

And a fourth, the most rapid and worst form, is one in which we feel, on manual examination, that not only the mammary gland, but the whole of the cellular structure of the breast, is infiltrated, which tends to extend across the chest and invade the other bosom in like manner, and produces frightful destruction by sloughing ulcerations in both organs, of which I have seen a few cases.

The first form I am inclined to let alone on account of its slow growth. The second should still, I think, be removed as early as seen, though, alas! too late in almost every case to prevent secondary infection.

The third should also be freely removed, though it is tempting to remove only the apparently diseased mass, leaving the rest of the gland.

In the fourth, in which I do not recommend operation, the patient should have her choice, as the return of the disease is so certain and soon.

I have always allowed patients to have a voice as to the removal in all these cases. In some I can urge operative proceeding, in others I cannot; hence I have had the opportunity, at the request of patients and their friends, of watching the

trial of quaek and popular nostrums, both German, Freneh, and Amerieau, for this disease, besides those of English herbalists, but with the same sad want of beneficial results, though eontinued for many months.

Cleanliness and disinfeetants, but of an unirritating eharaeter, eombined with the use of anodynes, have appeared to me the best and only remedies at present.

In all the eases I have myself operated upon and attended without operation—and they are very numerous—in only *one* has there been no return of the disease sooner or later, though in many the disease did not return on the site of the operation. (These are the boasted cures of the eaneer eurers.) This ease is yet alive eighty years old. She eame under my eare twenty-five years ago, having seen Sir J. Paget, who, I was informed, had recommended me to operate at onee, though there was strong probability that the disease would soon return.

It was a peeuliar ease, being a ehain of blue soft tumours, reaehing with short intervals from the border of the left axilla along the edge of the peetoral musele to the breast, but not involving the breast itself, apparently of a fungoid eharaeter, and likely soon to uleerate. Chloroform was given, and at one moment the physician administering it told me she was *gone*, but I eontinued to remove the diseased parts, and having opened the axilla, I *picked* out about six or eight smaller diseased tumours or glands, from about the size of a pea to that of a horse bean. The result of this case is so different from any other I have had that I cannot protend to understand it, and only wish a like result had followed in my other eases.

I have said nothing about operation in cases in which uleeration from malignant disease had already taken place, as I have not been able to satisfy myself in any easo that sueh a proceeding would be of adoquate use, even as a temporary measuro of relief, on aeeount of the extent to which secondary deposits havo already arrived.

I eannot concludo my observations on eancer without a few words on the patieneo and eourage whieh I have known displayed by some of my patients.

One lady who suffered from horrid eancerous ulceration of

the lower jaw, insisted, as long as her strength lasted, in dressing the wound herself and alone, with the aid of her looking-glass. Two others always dressed the great fearful wounds in the breast themselves till the last, and in the case of sarcoma above mentioned the husband continued to dress the wound twice and three times a day if required, entirely himself, certainly with the most tender gentleness and perfect cleanliness, so that no friend could suspect from what disease she suffered. But in this case the mass projected from the breast till about the size of an orange, always granulating but never sloughing. When first seen by me there was a gland at the base of the neck which neither enlarged nor decreased, and any operative procedure was forbidden ; nevertheless she appeared to fade away.

In conclusion I may state that I have from the beginning of my pupilage at the Birmingham General Hospital till the present time seen many operations for stone, and I am told I have had at least my full share of success in removing them. I have nothing to add on the subject except that I believe the difficulties I have seen occur have nearly always originated from an insufficient opening into the bladder, and a too great anxiety to pass the forceps through the wound, and a consequent tearing and separation of the surrounding parts, and subsequent infiltration of urine and consequent death.

As to fracture of the head, my experience is singularly unfortunate as to seeing recovery from fracture complicated with tearing and other injury to the dura mater, because I cannot recall a single case of recovery, though I feel convinced fractures of some parts of the base of the skull are recovered from. They were, I remember, believed to be always fatal in my young days.

I recall at the present time two cases of gentlemen who were thrown out of their traps backwards on to the ground, and had, I suspected, sustained fracture of the base of the skull. They lay for days insensible with blood, and in one case much blood, and a large quantity of watery fluid flowing from the ears. They are both alive now, and I believe well, when they are not tempted to exceed in stimulants, which one

of them was fond of, and then an irritable temper showed itself greater than natural. I, if course, cannot be certain about the existence of the fracture of the base in these cases ; but I cannot doubt it myself. In both these cases I was lucky enough to give a favorable diagnosis contrary to the opinion of the medical men called in, because in neither case could I see any sign of paralysis or rigidity in any member of the body.

As an example of an extraordinary recovery from a most extensive scalp wound, I saw a girl about sixteen years of age brought to the General Hospital whose whole hairy scalp and one ear had been torn away by being caught in machinery, leaving the pericranium but no bone exposed. A few minutes after the friends brought the scalp with all the hair to the hospital, the house surgeon replaced the scalp as well as he could, but after the first day or two, it was evident no union would take place, and it was again removed. The girl remained in the hospital for many months, the head being dressed with simple ointment and lint. She eventually went to her home at Knowle, where I saw her some years afterwards, the raw surface having nearly skinned over, the eyebrows being drawn up by the contraction to the top of her forehead. Her mother had attended to her during the whole of that period. I was told she was engaged to be married, and I suppose somebody married her.